City of Jeffersonville (IN) WWTP IN0023302 (Clark County)

Receiving waters: Cane Run, Falls of Ohio River, Ohio River, Mill Creek to Ohio River

Final Modification: March 13, 2009
Final permit issued: October 31, 2011, Effective December 1, 2011

11.	Does the fact sheet or permit indicate that any limits are less stringent than those in the previous permit or that the discharge rate will be higher than under the previous permit?	No	*1
11a.	Have parameters been added that are not present in the currently effective permit?	Yes	*2 Mercury limit
11b.	If yes to 11 or 11a, does the fact sheet adequately explain how the change is justified under the State's antidegradation policy? Contact the AD specialist or refer to the separate sheet on the antidegradation matrix.	Yes	*3 RPE
12.	Is the source a new discharger (*see:* § 122.2 definition)? If yes, will issuance of the permit conform to § 122.4(i)?	No	

1 . Previous permit (2006) facility flow was 6.0 MGD with mass limits based on average peak design flow of 25 MGD. The 2009 & 2011 permit are for an increased facility flow capacity of 9.0 MGD, with average peak design flow of 50 MGD. Secondary treatment limits for loadings are, therefore, higher in conjunction with volume of flow. Concentration limits are identical 2006 to 2009 & 2011 permits. For the March 2009 permit, interim limits were placed in permit page 3 of 53. 2009 final limits in table below reflect those in effect after completion of plant upgrade to 9.0 MGD, page 3b of 53.

	2006 permit limits Load limits (Monthly average)	March 13, 2009 Final Mod Final Load limits Monthly & weekly average	2011 permit limits Load limits (Monthly average)
CBOD Summer, Winter	2086, 5216 lbs/day	(S) 2,837 4,256 lbs/day (W) 7,093 11,439 lbs/day	4,173, 10,431 lbs/day
TSS Summer, Winter	2504, 6259 lbs/day	(S) 3,405 5,107 lbs/day (W)8,512 12,768 lbs/day	5,007, 12,518 lbs/day
Ammonia- nitrogen Summer, Winter	333.8, 667.6 lbs/day	(S) 425.6 652.6 lbs/day (W)851.2 1,277 lbs/day	626 lbs/day 1,252 lbs/day

2. Mercury limit of monthly average 12ng/L is effective in 2011 permit, 2006 permit required 6 times/year monitoring for mercury.

3. Page 7 of fact sheet, IDEM performed RPE for mercury on June 22, 2011. Mercury WQBEL based on surface WQ criteria of 327 IAC 2-1-6(a)(3), Table 6-1. Criteria is applied to the undiluted discharge. Permit includes 3 year schedule of compliance to reach final effluent limit.

4. Quarterly nutrient monitoring is added to 2011 permit. Per agreement with ORVWSC re Ohio River and Gulf of Mexico hypoxia. (page 6 of fact sheet).

Review of March 13, 2009 Reissuance- Permit Modification:

The fact sheet references, on page 4, Response #2, that IDEM requested of the permittee a justification for increased loadings and new receiving waters (Mill Creek).
New receiving waterway:
The justification, which is attached to the fact sheet for this permit mod, is based on a cost savings to the permittee of $1.6 million that will be applied to implementing the CSO LTCP (installing new larger 96 inch sewer pipe parallel to Cane Run = $5.6 million, new 72 inch sewer pipe to Mill Creek $4.0 million).
Increased loading:
Accommodate growth of city, removing septic systems tying into city sewer
Increase ability of WWTP to treat wet weather flow in order to reduce CSO frequency

Phosphorus:
ELPC commented on the lack of P limits, in response IDEM stated in the fact sheet page 4, that their rules at 327 IAC 5., 327 IAC 5-10-2 & 327 IAC 5-10-4 do not apply to discharges at Jeffersonville WWTP, and so therefore no limits need to be developed.

327 IAC 5-10-2 **Phosphorus removal**
"Sec 2. (a) Phosphorus removal or control facilities shall be required for a point source discharge where:
(1)(A) the daily discharge, as a monthly average, contains ten (10) pounds or more total phosphorus (calculated as elemental phosphorus – P); and
(B)(i) the discharge is located within the Lake Michigan or Lake Erie Basins; or
(ii) the discharge directly enters a lake or reservoir or enters a tributary within forty (40) miles upstream if a lake or reservoir; or
(2) the commissioner determines, irrespective of the quantitative total phosphorus content of the discharge, that phosphorus reduction is needed to protect downstream water uses or to insure that water quality standards applicable to the affected waters of the state are met."

And, "2(d) Notwithstanding subsection (b) or (c), a point source shall achieve the degree of phosphorus reduction necessary to comply with an applicable water quality standard for phosphorus."